

WHAT IS CLAIMED IS:

1. A test socket with a contact to be electrically connected to an external connection terminal of a member to be tested so as to be used for testing an electrical characteristic of the member, wherein

SLY
BI
said contact comprises:

a tip end to be brought into contact with said external connection terminal; and

resiliently-deformable bulging sections which extend horizontally with respect to said tip end.

2. The test socket as defined in claim 1, wherein

said resiliently-deformable bulging sections are two members which are disposed opposite to each other and extend in opposite horizontal directions with respect to said tip end.

3. The test socket as defined in claim 1, wherein

said resiliently-deformable bulging sections are two members which are disposed opposite to each other with respect to the tip end, and the rigidity of one member differs from that of the other member.

4. The test socket as defined in claim 1, wherein

a portion of said tip end to be brought into contact with said external connection terminal of the member to be tested

004220 24052960

is formed into a roundly-pointed shape or a substantially hemi-spherical shape.

5. The test socket as defined in claim 1, wherein

5 a portion of said tip end to be brought into contact with said external connection terminal of the member is formed so as to assume a smooth corrugated geometry.

6. The test socket as defined in claim 5, wherein

10 a plurality of protuberances formed from smooth surfaces and a plurality of recesses which are adjacent to said protuberances and are formed from smooth surfaces are formed in said tip end to be brought into contact with said external connection terminal of the member.

15

7. The method of manufacturing the test socket defined in claim 6, comprising the steps of:

20 punching material so as to define the profile of a contact of a test socket belonging to an electronic device or semiconductor package;

forming, in a tip end to be brought into contact with an external connection terminal of a member to be tested of the punched component, a plurality of protuberances and a plurality of recesses from smoothly-curved surfaces such that the
25 recesses are located adjacent to the protuberances; and

forming a film on the punched component having the irregularities formed therein.

8. The test method involving use of the test socket as defined in claim 1, comprising the steps of:

bringing an external connection terminal of a member to be tested into contact with a tip end of the contact of the test socket;

sending, to the member, an electric signal transmitted from a terminal connected to a circuit board; and

testing the operation of the member through use of the electric signal returned from the test member.

9. The member tested by the test method which involves use of the test socket as defined in claim 8.

10. A test socket comprising:

a contact to be electrically connected to an external connection terminal of a member to be tested and is to be used for testing the electrical characteristic of the member, wherein

said contact includes:

a plurality of tip ends to be brought into contact with the external connection terminal;

resilient sections connected to said respective tip ends;

and

543
533
a support section to which said resilient sections are connected or to which one resilient section is connected by way of the other resilient section.

5

11. The test socket as defined in claim 10, wherein said resilient sections connected to said tip ends are two members which are disposed opposite to each other and bent so as to extend horizontally in opposite horizontal directions with respect to said tip ends.

12. The test socket as defined in claim 11, wherein a clearance is defined between said plurality of tip ends.

15 13. The test socket as defined in claim 10, wherein a vector is defined by means of interconnecting a resilient section connected to a tip end, the center of a connection section at which a support section supports the resilient section, and the center of said tip end to be brought into contact with an external connection terminal of a member to be tested, the vector substantially matching the direction in which said tip end is brought into contact with said external connection terminal.

25

09625047.072400

007220" 24052960

14. The test socket as defined in claim 10, wherein
a portion of at least one of said tip ends to be brought
into contact with said external connection terminal of the
member to be tested is formed into a roundly-pointed shape or
5 a substantially hemi-spherical shape.

15. The test socket as defined in claim 10, wherein
a portion of at least one of said tip ends to be brought
into contact with said external connection terminal of the
10 member is formed so as to assume a smooth corrugated geometry.

16. The test socket as defined in claim 15, wherein
a plurality of protuberances and recesses are formed from
smooth surfaces in at least one of the tip ends to be brought
15 into contact with the external connection terminal of the member
such that the protuberances and recesses are adjacent to each
other are formed.

17. A method of manufacturing said test socket defined in
20 claim 10, comprising the steps of:

Sub B4
punching a member having the property of a spring into
a component so as to define the profile of a contact of a test
socket belonging to an electronic device or semiconductor
package;

25 splitting a tip end of the contact into a plurality of

pieces; and

plating said punched component.

18. A method of manufacturing said test socket defined in
5 claim 16, comprising the steps of:

punching a member having the property of a spring into
a component so as to define the profile of a contact of a test
socket belonging to an electronic device or semiconductor
package;

10 splitting a tip end of the contact into a plurality of
pieces;

forming a plurality of protuberances and recesses from
smooth surfaces in the surfaces of the tip end such that the
protuberances and recesses are adjacent to each other;

15 plating the roughened component.

19. The test method involving use of the test socket as
defined in claim 10, comprising the steps of:

bringing an external connection terminal of a member to
20 be tested into contact with a tip end of the contact of said
test socket;

sending, to said member, an electric signal transmitted
from a terminal connected to a circuit board; and

testing the operation of the member through use of the
25 electric signal returned from the test member.

004220 24052960

Sub
B4

~~20. The member tested by the test method which involves use
of said test socket as defined in claim 19~~ **B**

004220" 24052950